#### **UNIT 676**

### MANDALAY STATE BEACH

**GENERAL PLAN** 

August 1983

## STATE OF CALIFORNIA

department of parks and recreation

## MANDALAY STATE BEACH PRELIMINARY GENERAL PLAN

Submitted by

County of Ventura

Property Administration Agency

June 1983

Prepared by

McClelland Engineers, Inc.

Environmental Services

## STATE OF CALIFORNIA

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DEPARTMENT OF PARKS AND RECREATION

#### STATE PARK AND RECREATION COMMISSION

P.O. BOX 942896, SACRAMENTO, CA 94296-0001



Resolution 56-83
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Los Angeles on
August 12, 1983

WHEREAS, the Director of the Department of Parks and Recreation has presented to this Commission for approval the proposed Mandalay State Beach Preliminary General Plan; and

WHEREAS, this reflects the long-range development plans to provide for the optimum use and enjoyment of the unit as well as the protection of its quality;

NOW, THEREFORE, BE IT RESOLVED that the State Park and Recreation Commission approves the Department of Parks and Recreation's preliminary General Plan for Mandalay State Beach, dated June 1983, including the proposed modification, dated August 4, 1983, to provide a State Beach, subject to such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement carrying out the provisions and objectives of said Plan; with a further requirement that prior to developing either the thematic food service or resources interpretive center that the Commission have further review of the size, location, and character of these facilities.



#### McClelland engineers, inc. / environmental services

5450 Ralston Street, Ventura, California 93003, Tel. (805) 644-5535, Telex 659-241, Telecopier (805) 642-4791

June 10, 1983

County of Ventura Property Administration Agency 800 S. Victoria Avenue Ventura, CA 93009

Attention: Thomas M. Volk, Director

Dear Mr. Volk:

Transmitted herewith is the Preliminary General Plan for Mandalay State Beach. As required by Division 5, Chapter 1, Section 4332 of the Public Resources Code, the plan consists of a resource element, and a land use and facilities element. The plan implements the February 11, 1983, action of the California State Park and Recreation Commission classifying the unit a "state beach."

We appreciate the opportunity to have worked with you on the planning of a new beach park in Ventura County.

Very truly yours,

McCLELLAND ENGINEERS, INC.

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Mel Willis, AICP Project Manager

MRW:cd

DEPARTMENT OF PARKS AND RECREATION

#### STATE PARK AND RECREATION COMMISSION

P.O. BOX 942896, SACRAMENTO, CA 94296-0001



Resolution 3-86
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Sacramento
on January 16, 1986

WHEREAS, the State Park and Recreation Commission at its meeting in Los Angeles on August 12, 1983 approved the Mandalay State Beach General Plan, with a requirement that prior to developing either the thematic food service or resource interpretive center that the Commission have further review of the size, location and character of these facilities; and

WHEREAS, the County of Ventura, through the Director of the Department of Parks and Recreation, has presented to this Commission the Economic Planning Study for Proposed Mandalay State Beach Interpretive Center and Hostel/Conference Center, dated June 14, 1985, prepared for the County of Ventura; and

WHEREAS, this reflects the long-range development plans for the interpretive center and hostel/conference center to provide for optimum use and enjoyment of this portion of Mandalay State Beach.

NOW, THEREFORE, BE IT RESOLVED that the State Park and Recreation Commission accepts the Economic Planning Study for Proposed Mandalay State Beach Interpretive Center and Hostel/Conference Center as meeting the requirement for further review of these facilities, subject to such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement the provisions and objectives of said plan.

## STATE OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

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MANDALAY STATE BEACH PRELIMINARY GENERAL PLAN

Submitted By

County of Ventura
Property Administration Agency
800 S. Victoria Ave.
Ventura, CA 93009

Prepared By

McClelland Engineers, Inc. Environmental Services 5450 Ralston Street Ventura, CA 93003

# MANDALAY STATE BEACH 1983 GENERAL PLAN ATTACHMENTS

I. COMMISSION RESOLUTIONS

56-83 August 12, 1983 3-86 January 16, 1986

II. PROPOSED MODIFICATION, DATED AUGUST 4, 1983
Cover letter from Ventura County to Commissioners
General Plan Figures 2, 3, and 4 (pages 11, 22, and 34)

Revised text pages 19, 29, 36, 37, 43 and 47

III. EIR COMMENTS AND RESPONSES, DATED JULY 19, 1983

Cover letter from Interim Director to Commissioners General Plan Map Figure 4 (page 34) Public Comments (1982) and Responses

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**GENERAL DATA** 

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## MANDALAY STATE BEACH GENERAL DATA

<u>Location</u>: On the Ventura County coastline, south of the Santa Clara River, within the City of Oxnard.

<u>Size</u>: 37 hectares (90 acres) with approximately 0.84 kilometers (2750 feet) of ocean frontage.

<u>Facilities</u>: 70 primitive campsites (tents only), resource/interpretive center, interpretive trails, day-use beach facilities, and a food service facility.

<u>Vegetation</u>: Mandalay State Beach is dominated by coastal dune-marsh vegetation with foredune, backdune and mixed backdune-marsh components. No rare or endangered plant species have been observed within the park unit.

<u>Wildlife</u>: Mandalay State Beach is a diverse assemblage of natural coastal habitats containing a wide variety of terrestrial and marine fauna. No rare or endangered species of wildlife have been observed within the park unit.

Outstanding Natural Features: Within the park unit is a wide sandy beach, sand dunes, and two small freshwater marshes.

Historical and Archaeological Values: No previously recorded archaeological, ethnographic, or historic landmark sites occur within Mandalay State Beach. However, two species of rushes (Juncus), an important basketry material, occur within the unit. There is no evidence of basketry material collecting within the unit.

Interpretive: Guided trails will originate at interpretive center and circulate through the eastern portion of the site. Themes for interpretive trails include natural history of coastal dune habitat, and ecology

of a marsh. Because of the proximity of the park unit to onshore and offshore energy facilities, opportunity also exists for the interpretation of energy development in coastal areas.

Ownership: Although Mandalay State Beach is a unit of the State Park system, the operator will be the County of Ventura. On September 21, 1982, the Ventura County Board of Supervisors approved an agreement with the State of California to exchange the County-owned Mandalay Beach property for State-owned land at Happy Camp Canyon near Moorpark. Under the terms of the agreement, the State of California will own the Mandalay Beach property, but the County of Ventura will develop and operate it as a unit of the State Park system.

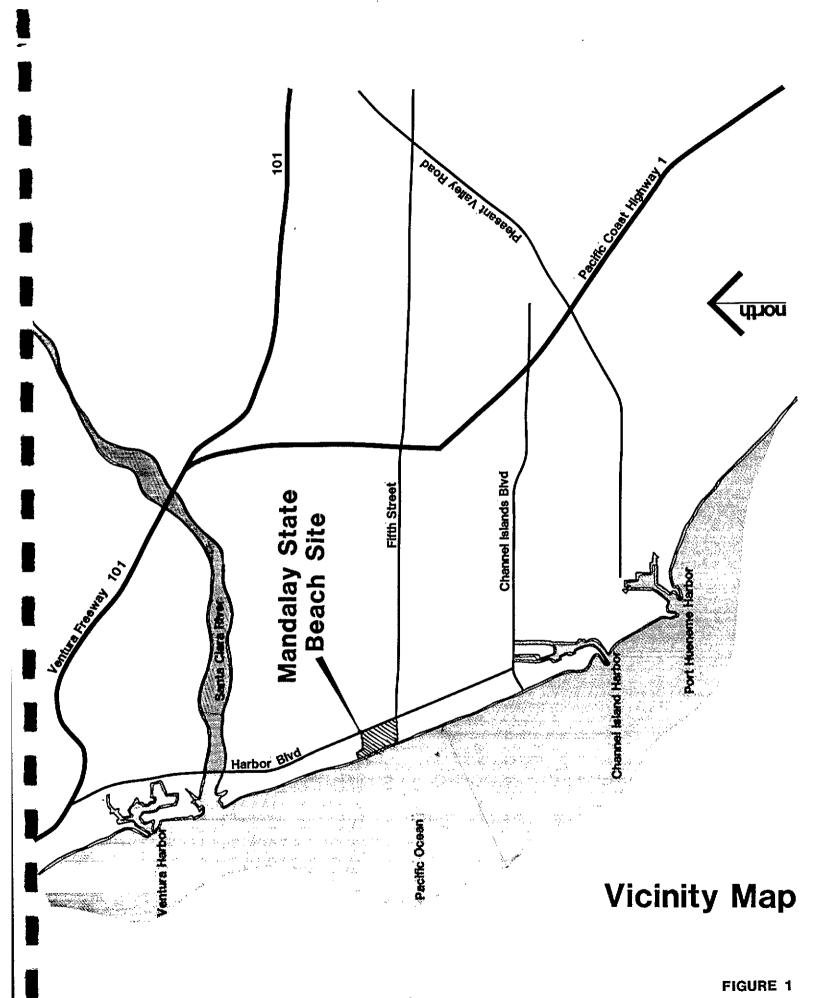
RESOURCE ELEMENT

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#### INTRODUCTION

The Resource Element for Mandalay State Beach has been prepared pursuant to Section 5002.2 (amended September, 1978) of the Public Resources Code, which requires a Resource Element to be prepared following classification or reclassification of a State Park System unit. In meeting this requirement, the Resource Element contains: 1) the declared purpose of the unit in terms of its classification as a state beach; 2) a summary and evaluation of recreational values and of natural and cultural resources; 3) a statement of allowable use intensity; and 4) resource management policies nesessary to protect important resource values.

On February 11, 1983, in response to the recommendation of the County of Ventura, the California State Park and Recreation Commission classified the park unit at Mandalay Beach a "state beach." This action was based upon the substantial amount of ocean frontage at the site affording it significant opportunities for swimming, fishing, and other beach oriented recreational activities.



#### INVENTORY SUMMARY

#### UNIT IDENTIFICATION

Mandalay State Beach is located on the Ventura County coastline, within the City of Oxnard, approximately one mile south of the entrance to McGrath State Beach (see Figure 1). The unit is generally bounded on the east by Harbor Boulevard, on the south by Fifth Street, on the north by Southern California Edison's Mandalay Beach Generating Plant, and on the west by the Pacific Ocean. The unit contains approximately 90 acres (37 hectares) with 2,750 feet (0.84 kilometers) of ocean frontage. Vehicles would enter the unit through an entrance from Fifth Street.

Mandalay State Beach is on the seaward edge of the Santa Clara River alluvial plain. The site is part of the Mandalay dune complex, consisting of two distinct but interrelated landforms—sandy beach and dune complex. The seaward edge of the site is characterized by a relatively straight shoreline, bordered by a moderately sloping sandy beach, varying in width in the summer months from 100 to 200 feet (30 to 60 meters).

The sandy beach is separated from inland areas by a series of sand dunes which are part of the Mandalay dune complex. This dune complex is comprised of a foredune and backdune component. The foredunes, or primary dunes, form a series of steep slopes ranging in elevation from approximately 25 to 30 feet (7.5 to 9 meters). Although the foredunes are normally unstable, the introduction of European beach grass has provided a degree of stabilization. Inland of the foredune zone is the backdune zone, a series of low, hummocky dunes and sandy plains with a total relief of approximately 2 to 3 feet (0.6 to 0.9 meters).

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A small freshwater marsh, located in the backdunes, is a significant feature of Mandalay State Beach. This habitat area consists of dense willow thickets scattered amidst a lush ground cover of rushes and other herbs associated with the upper edge of a freshwater marsh.

Wildlife is abundant in the backdune scrub and marsh habitats at the site, particularly in the dense willow thickets that offer protection and nesting opportunities for numerous birds.

Mandalay State Beach has no existing recreation facilities; however, it is one of the most popular surf-fishing areas in Ventura County.

#### RESOURCE SUMMARY AND EVALUATION

Mandalay State Beach is within the Coastal Strip Landscape Province. This province includes lands along the immediate coastline of California and offshore islands where flora and fauna are directly influenced by the maritime climate.

The following resource information is summarized from the <u>Mandalay</u> State Beach Inventory of Features.

#### Natural Resources

#### 1. Topography

Mandalay State Beach is located on a coastal plain formed by the deposition of sediments from the Santa Clara River and the Calleguas-Conejo Creek drainage system. The unit is part of a coastal dune complex consisting of two distinct but interrelated landforms -- sandy beach and dunes.

The sandy beach is the western boundary of the site and is characterized by a relatively straight shoreline bordered by a moderately sloping sandy beach. The dune complex is comprised of a steep foredune component, and a backdune or upland flats component with a series of low hummocks and sandy plains.

#### 2. Climate

The climate of the Ventura-Oxnard area is typical of coastal southern California with mild winters and slightly warmer summer temperatures.

The nearest weather station to Mandalay State Beach is located at Oxnard, although precipitation data are available for the City of Ventura, which is closer. High temperatures from late spring to fall average between 21° Celsius (C), or 70° Fahrenheit (F), and 24°C (75°F). Low temperatures during this period average between 9°C (49°F) and 13°C (55°F). January is the coldest month of the year with an average maximum temperature of 18°C (65°F), and average nighttime temperature of 6°C (42°F).

During much of the year, winds in the Ventura-Oxnard area consist of moderate daytime sea breezes. At night, the breezes reverse to flow from land to sea as a result of differential heating and cooling of ocean and land. The hot, dry Santa Ana winds from the interior occur infrequently in the fall and winter.

Annual rainfall in the Ventura-Oxnard area is about 38 centimeters (15 inches), with 95 percent falling between November and April. Average monthly rainfall during the summer is negligible.

#### 3. Hydrology

Mandalay State Beach is entirely within the Santa Clara River watershed. Because of high soil permeability in the coastal beach series, no surficial drainage patterns have developed within the unit, other than a small brackish-freshwater marsh.

#### 4. Geology

Mandalay State Beach is located along the coastal margin of the Oxnard Plain within the Ventura Basin. The Ventura Basin is located in

the western portion of the Transverse Range Physiographic Province of California.

Numerous faults have been recorded beneath the alluvium of the Oxnard Plain. Three of these recorded faults are near the park unit: the Pitas Point-Ventura, Oak Ridge, and McGrath faults.

Other active geomorphic processes within the area are limited to shoreline processes, fluvial erosion and deposition, and aeolian activity.

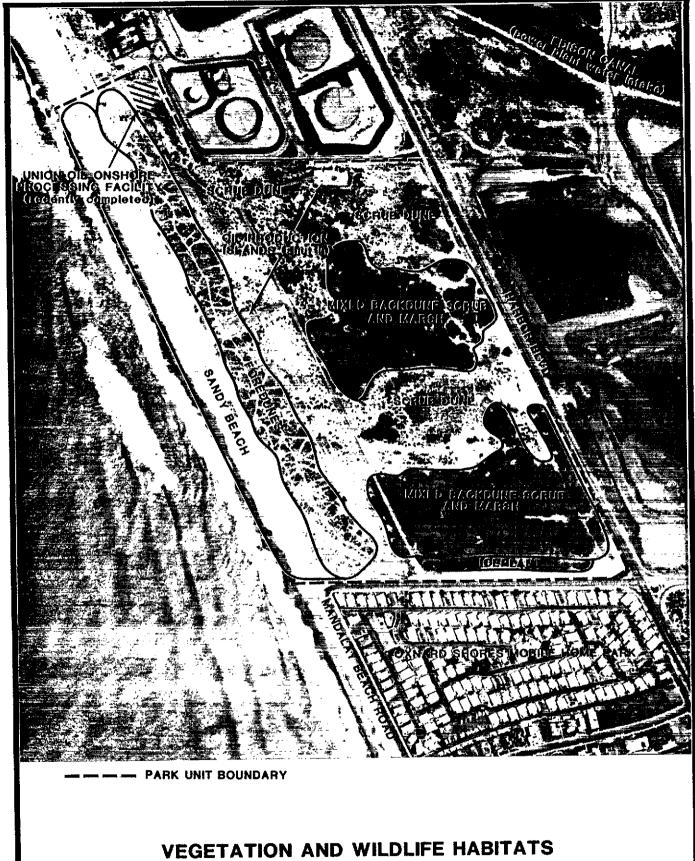
#### 5. Soils

The principal soil type within the unit is Coastal Beach (Cb) which makes up the sandy beach and adjacent sand dunes. Due to waves during high tide and exposure during low tide, this soil type is essentially barren; however some areas in the adjacent sand dunes have been stabilized by native and introduced vegetation. The soil has been sorted by wave action along the forebeach and by wind in the area of the dunes. This soil type has no value for agriculture and is used for urban development and recreation. Low water holding capacity and erosion hazard are the limitations of Coastal Beach soils.

A second soil type within the unit is Hueneme Sandy Loam (Hn). This soil type, found in two locations within the unit, is associated with alluvial plains and basins. It consists of calcareous, loamy sand and sandy loam with very little clay and low plasticity. Plant species of this soil type are associated with a mixed backdune scrub and marsh habitat, as well as indicative of the presence of fresh or brackish near surface water. Poor drainage and slow infiltration rate, resulting in a seasonally high water table, are limitations of Hueneme Sandy Loam soil.

#### 6. Plant Life

Mandalay State Beach, located on the Oxnard Plain, is within an area dominated by coastal dune-marsh vegetation (see Figure 2). The



foredune vegetation is dominated by introduced species of European beach grass (Amophila arenaria). Other representative species of the foredunes are beach evening primrose (Camissonia cheiranthifolia), sea rocket (Cakile spp.), sea-fig (Carpobrotus acquilateralis), and hottentot fig (Carpobrotus edulis).

The backdune area contains dune and marsh vegetation. This area has dense willow thickets up to 15 feet tall, scattered amidst a lush ground cover of rushes and other herbs associated with a marsh habitat. The predominant vegetative species of this habitat are the arroyo willow (Salix lasiolepis), rushes (Scirpus sp., Juncus acutus, Juncus textilis), coyote bush (Baccharis pilularis var. consanguinea), and yerba mansa (Anemopis californica).

The mixed backdune scrub and marsh habitats provide valuable habitat for many species of animal life. The foredunes are sensitive to human disturbance, and access should be monitored or controlled.

No rare or endangered plant species have been observed nor recorded at Mandalay State Beach.

#### 7. Animal Life

Mandalay State Beach is a diverse assemblage of natural coastal habitats containing a wide variety of terrestrial and marine fauna. Larger mammals, including the coyote, gray fox, racoon and skunk may occasionally forage within the site. Additionally raptors, including the red-tailed hawk, American Kestrel, sharp-shinned hawk and white-tailed kite, may utilize this site for hunting.

With its limited vegetative cover, the foredunes do not offer suitable habitat to animal species except for some forms of avifauna. Resident, migrant, and wintering birds that may utilize this habitat are pelicans, gulls, terns, and sandpipers.

The backdune-marsh area offers suitable habitat for a much larger and more diverse animal population. Abundant avifauna, relatively large populations of rodents, and various reptiles and amphibians may reside or otherwise utilize this area.

No rare or endangered species of wildlife have been observed within the unit. The endangered California least term nests on the open sand north of the unit at McGrath State Beach, and south of the unit at Ormond Beach.

Mandalay State Beach includes a surf-swept sandy beach. Marine fauna consist of invertebrates (i.e., sand crabs and clams) that provide forage for marine avifauna. Occasionally a California sealion or harbor seal utilizes this beach for resting.

The shallow water surf zone offshore the unit is popular with sportfishermen. Species highly valued by fishermen at the site include surfperch and croakers. Occasionally schools of anchovy occur in the shallow waters offshore the site, providing food for various marine avifauna.

#### Cultural Resources

The coastal region in which Mandalay State Beach is located has been occupied by the Ventureno Chumash Indians for over 5000 years.

Before the presence of European man, back to the year 2000 BP, the natives along this coast demonstrated a high degree of specialized adaptation to this environment and an efficient utilization of local resources, especially marine resources.

The earliest documented European contact near Mandalay State Beach was Cabrillo's voyage in 1542-43; however, a significant Spanish presence in the region was not established until the Portola expedition in 1769. A Spanish settlement was established in Ventura soon after.

Although the Portola expedition passed north of Mandalay State Beach, it failed to note Indian settlements on the Santa Clara River below Santa Paula. On his journey down the valley, Portola is reported to have encountered a large number of rancherias, in particular Kanaputegunon and 'Isha, both presumably located on the southern bank of the mouth of the Santa Clara River. Published accounts provide no evidence to indicate the Portola expedition crossed to the south bank of the river.

In 1837, the Mexican government granted El Rio de Santa Clara o ha Colonia, now the Oxnard area, to a group of soldiers. The Santa Clara grant early became a producing agricultural region, a land use continuing to the present in most of the area. In 1841, San Miguel was granted to R. Alivas and F. Larenzana. The San Miguel Grant is situated on the north bank of the Santa Clara River.

There are no previously recorded archaeological, ethnographic, or historic landmark sites within Mandalay State Beach. However, two species of Juncus (J. textilis and possibly J. acutus), an important basketry material, occur within the unit. According to local Chumash descendants, no basketry material collecting has occurred at Mandalay Beach. Ethnographic interviews provided no evidence to indicate present ethnic significance of basketry material collecting at Mandalay Beach. However, this site would have significance to local Chumash descendants if it becomes a collecting site.

#### Scenic Resources

Mandalay State Beach is in a relatively scenic area because of its natural resources and proximity to the ocean. The unit possesses a diversity of natural elements, with associated flora and fauna, including ocean, sandy beach, and dunes.

#### Recreational Potential

A primary contributing factor to the site's recreational potential is its natural features and proximity to the ocean. This interface with the ocean creates other opportunities related to the marine environment.

Mandalay State Beach is adjacent to the Southwest Community of the City of Oxnard. Currently, the 90 acre site is comprised of coastal dunes used for unregulated beach-oriented recreational activities (e.g., beachwalking, day use, swimming, fishing, etc.). In particular, the beach fronting the project site is one of the most popular surf-fishing beaches in the area.

Mandalay State Beach is located approximately one mile south of the entrance to McGrath State Beach. Activities associated with the ocean will attract many people to the site. The proximity to McGrath should also attract a number of users, and the site could act as an overflow facility for McGrath State Beach.

The California Bikecentennial Trail is planned for circulation through the site. The trail would link the entire state from north to south, and will act as a connector from McGrath State Beach to Mandalay State Beach. Users of the trail will be traveling through the site. This creates specific needs related to the cyclists, such as group camping, eating, and resting.

#### RESOURCE POLICY FORMATION

#### CLASSIFICATION

Although Mandalay State Beach is a unit of the State Park system, the park operator will be the County of Ventura. On September 21, 1982, the Ventura County Board of Supervisors approved an agreement with the State of California to exchange the County-owned Mandalay Beach property for State-owned land at Happy Camp Canyon near Moorpark. Under the terms of the agreement, the State of California will own the Mandalay Beach property, but the County of Ventura will develop and operate it as a unit of the State Park system.

On February 11, 1983, the California State Park and Recreation Commission classified the Mandalay Beach unit a "state beach," a category of state recreation unit. Section 5019.56 of the <u>Public</u> Resources Code defines these units as follows:

"State recreation units consist of areas selected, developed, and operated to provide outdoor recreational opportunities. Such units shall be designated by the commission by naming, in accordance with the provisions of Article 1 (commencing with Section 5001) and this article relating to classification.

In the planning of improvements to be undertaken within state recreation units, consideration shall be given to compatibility of design with the surrounding scenic and environmental characteristics.

State recreation units may be established in the terrestrial or underwater environments of the state and shall be further classified as one of the following types:...

(d) State beaches, consisting of areas with frontage on the ocean, or bays designed to provide swimming, boating, fishing, and other beach-oriented recreational activities. Coastal areas containing ecological, geological, scenic, or cultural resources of significant value shall be preserved within state wildernesses, state reserves, state parks, or natural or cultural preserves."

#### DECLARATION OF PURPOSE

The purpose of Mandalay State Beach is to make available the sandy ocean beach and adjacent coastal dunes for public recreational use and enjoyment. In general, all public beach-related recreational activities may be provided that can be accommodated without impairing the scenic or natural integrity of the site.

The dune and wetlands (marshland) ecosystem is recognized for its important natural values and shall be managed for its protection and perpetuation.

#### ZONE OF PRIMARY INTEREST

Mandalay State Beach is bordered on the north by Southern California Edison's Mandalay Beach Generating Station, on the south by the Oxnard Shores Mobile Home Park, and on the west by the Pacific Ocean. The only land adjacent to the unit possibly affecting its purpose and management objectives is to the east. This property is a recently closed oil field waste disposal site which could affect Mandalay State Beach, depending on its future land use.

#### RESOURCE MANAGEMENT POLICIES

Mandalay State Beach contains a diverse assemblage of natural coastal habitats with a wide variety of terrestrial and marine fauna. The site has been significantly disturbed by man's activities in the past, particularly from off-road vehicles and energy production. However, the site has many unique scenic and natural features capable of restoration through sound management practices. Therefore, to maximize the scenic and interpretive potential of Mandalay State Beach, the resource management policies of this park unit shall focus upon the restoration of significant habitat areas, and their protection from disturbance by the proper siting of structures and activities.

Specifically, it shall be the resource management policy of the State Department of Parks and Recreation to:

- 1. Encourage recreational and interpretive uses relating to the unit's beach and ocean orientation. These uses shall be permitted, provided they do not substantially detract from, diminish, or harm the recreational, natural, or cultural values present. In planning facilities, the department should consider the use it will encourage, public safety, and the potential impact on the unit's natural or cultural values. In this regard, the department shall strive to ensure development in the unit and public use are in proper relation with the sensitivity of the habitat to disturbance.
- 2. Protect the scenic values of the property, including both interior views and views from adjacent lands, by carefully siting and landscaping all development in the unit. Barrier landscaping shall be used along boundary between Southern California Edison plant and park unit.
- 3. Use plants native to the coastal region in landscaping to provide a more natural setting and more suitable wildlife food, and to reduce the need for watering and other costly maintenance. No exotic plant shall be introduced that may establish and encroach upon natural plant and animal communities. To minimize disruption of natural setting, removal of vegetation shall be restricted to actual building sites and roads.
- 4. Eliminate or control unwanted exotic (nonnative) plants and weeds. Hand, mechanical, and biological control measures will be preferred over chemical methods of weed control. Herbicides proposed for plant control shall meet all requirements in the departments's <u>Pesticide Handbook</u>.

- 5. Control animal populations, such as ground squirrels, when necessary to minimize potential public health hazards. The reduction or elimination of preferred habitat of nuisance species shall be considered first when control becomes necessary.
- 6. Include in final project plans a comprehensive restoration and habitat maintenance program, with an emphasis on native coastal species.
- 7. Protect the marshland environment within the unit for its high wildlife values. The habitat to be preserved is the mixed backdune scrub and marsh depicted on Figure 2. A 50 foot buffer zone shall be established around this area in which no facilities shall be permitted except for interpretive trails and observation points. These facilities shall be carefully sited so that visitor activities will not diminish use of the area by wildlife.
- 8. Eliminate illegal off-road vehicle use at the unit.
- 9. Protect the natural scenic qualities of the unit by use of materials, such as wood siding, with weathering capabilities that add a sense of permanence to the structure.
- 10. Site permanent structures to reduce the potential of problems caused by wind-blown sand and erosion. No permanent structures should be placed on, behind, or in front of the activated dunes. Permanent structures should be sited far enough from the foredunes to avoid destroying vegetation at the base of the dune.
- 11. Provide special protection measures in the event of future colonization of the unit by the endangered California least tern.

- 12. Include provisions in all development plans for the existence of any yet-unrecorded cultural resources. The Native American community shall be consulted in the final design phase and in the development of an interpretive program.
- 13. Provide a public sewer system to avoid degradation of the marsh or the nearshore environment, because of the high water table within the unit.
- 14. Direct runoff from the developed areas of the unit away from the marsh areas.
- 15. Administer other values not specifically mentioned in this element, under guidelines in the department's Policies, Rules, Regulations and Orders, and Resource Management Directives.

#### ALLOWABLE USE INTENSITY

California state law (Section 5019.5, Public Resources Code) requires the State Department of Parks and Recreation to cause a land carrying-capacity survey to be prepared before any recreation development plan is completed for a park unit. As a step in determining carrying capacity, the department is using "allowable use intensity," which is a more recreation resource-oriented concept.

The determination of allowable use intensity has three basic interrelated components: 1) management objectives; 2) visitor perceptions and attitudes; and 3) impact of any development and use on natural and cultural resources (i.e. determination of ecological and cultural resource sensitivity).

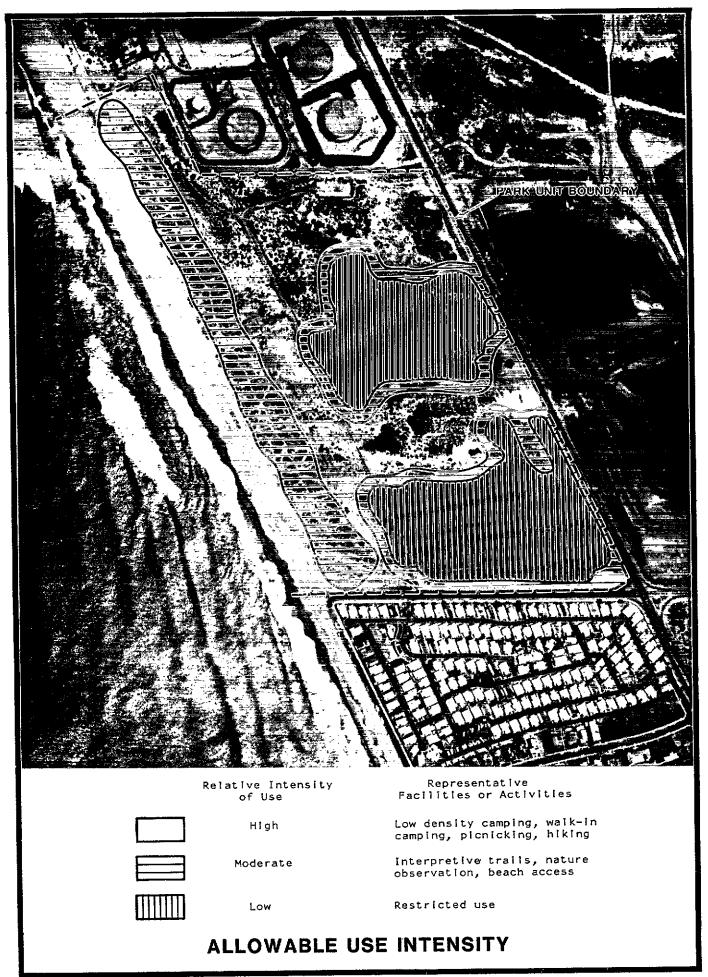
Management objectives for Mandalay State Beach are generally set forth in the statutes defining a state beach in the Unit Identification and Classification section of this Resource Element. Visitor perceptions and attitudes are sometimes referred to in relation to "social carrying capacity" and involve assessing what the recreationist perceives as an acceptable recreational environment (e.g., what degree of isolation or crowding is acceptable; what amount of site deterioration is acceptable; and other perceptions and attitudes pertaining to the quality of visitors' recreational experience). These factors are very difficult to quantify and are related to social development and the environmental awareness of society.

The third component to determining allowable use intensity involves an analysis of the natural and cultural resources to determine the physical constraints of the area for development of facilities and the ability of the ecosystem to withstand human impact (ecological sensitivity). This analysis is based upon a number of factors including:

- archaeological and historical sites and features;
- scenic values;
- soils, their erodability and compaction potential;
- geologic factors, such as slope stability and relief;
- hydrologic considerations, including potential for pollution of surface waters, flooding, or for depleting surface and ground waters through water use;
- vegetation characteristics, such as durability, fragility, and regeneration rates; and
- wildlife considerations, such as tolerance to human activity,
   wildlife population levels, and stability.

Additional considerations for determining ecological sensitivities are rare and/or endangered plants and animals, unique biotic features or ecosystems, and examples of ecosystems of regional or statewide significance (marshes, riparian areas, and vernal pools).

Based on the preceding factors, allowable use intensity for Mandalay State Beach was determined and delineated (see Figure 3). This map includes a general description of appropriate activities in designated areas of high, moderate, and low use intensity. These activities are



given for general planning purposes only. On-site field investigation by qualified resource specialists is recommended before the selection of specific sites and the design of new facilities. Site investigations may indicate that higher or lower use intensities would be appropriate.

# LAND USE AND FACILITIES ELEMENT

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#### EXISTING CONDITIONS AND ASSUMPTIONS

#### RECREATION VALUES

Because of Mandalay State Beach's location near major urban centers, its most important recreational value is day-use, beach-oriented recreation, and the interpretation of natural coastal habitats. Other recreation values include:

- Approximately 2750 feet of wide sandy beach
- An area of coastal sand dunes
- Educational opportunities associated with the small freshwater marsh habitat
- Opportunities for tent camping

#### RECREATION USE

Principal recreation activities at Mandalay State Beach shall include:

- Primitive camping (i.e., tent facilities only)
- Beachcombing/hiking/jogging
- Swimming/sun bathing
- Fishing
- Surfing
- Nature study
- Photography
- Natural resource interpretation

#### PHYSICAL FACTORS

- The primary recreation season (April through September) coincides with the hot summer months.
- Vehicular access to the unit is available from Fifth Street.

- Development potential is limited by the following factors:
  - The two small backdune scrub/marsh areas are sensitive to disturbance requiring buffering from adjacent moderate to high intensity uses.
  - Strong winds and localized poor soil conditions prevent vegetative screening.
  - The local high ground water conditions in the area result in severe limitations to the use of septic tank systems; therefore, a public sewer system is required for the unit.
- The flat backdune area between the marsh habitat and the foredunes has potential for development because of the following factors:
  - The area has been significantly disturbed in the past by unregulated off-road vehicle activity, as well as energy development within the parcel and on adjacent properties.
  - The area contains only a poor example of a coastal scrub vegetative association.
  - There is an existing access road through the backdune area.

#### PLANNING PROCESS AND ISSUES

The planning process for Mandalay State Beach involved input from government agencies and the general public. The Ventura County "Regional Recreation Areas Plan" (1977) is the primary policy document identifying the site as a future beach park. Preliminary physical design of the park was by Kammeyer & Partners, Inc. (1982), which was subsequently revised by McClelland Engineers/Environmental Services based on input from County staff and the California Department of Parks and Recreation. This design process for Mandalay State Beach included review of alternative concepts. The following is a description of the planning process for Mandalay State Beach.

The site and its environmental setting were first inventoried to determine physical limitations and design opportunities. This process included the evaluation of existing conditions, such as the natural site amenities, overall site configuration, special features, external influences, site accessibility, and adjacent land use.

Following completion of the site inventory, several meetings were held with County staff, City of Oxnard staff and the design consultant (Kammeyer & Partners) to review the site analysis data and to help establish goals and objectives for the project. Preliminary development studies were completed to present alternative concepts for development. The amenities proposed for the site by the Ventura County Regional Recreation Areas Plan were each evaluated. The feasibility and relationship of uses were studied, along with orientation and circulation, and alternative design concepts prepared. As alternatives were established, they were reviewed by County staff.

All preliminary data, concepts and findings were presented to the County staff, advisory groups, and the City of Oxnard staff. Their comments were assembled, and the initial conceptual plans revised. Subsequently, a graphic preliminary development plan was produced utilizing the available data and input received. The plan developed

represented a composite of several alternative concepts for the site. A preliminary fiscal analysis was completed for the park unit. Recommendations were then made regarding sufficient revenue opportunities to support the maintenance and operational expenses of the park, one of the planning constraints recognized early in the planning process. At this point, the County staff, advisory groups, and public again reviewed the plan. Each of the elements which had gone into producing the concepts and plan were re-examined prior to commencing the next phase.

Refinements to the design were then made producing a schematic design plan with refined cost estimate, construction phasing program, and identified engineering considerations. After review of the schematic design plan, another refinement was made to produce the final master plan.

After completion of the final master plan report, an Environmental Impact Report for the proposed park unit was prepared by Envicom Corporation, pursuant to the requirements of the California Environmental Quality Act, and circulated by the County of Ventura for public review.

The Preliminary General Plan for Mandalay State Beach, submitted to the California Department of Parks and Recreation, was prepared by McClelland Engineers/Environmental Services, based on changes to the original plan adopted by the Board of Supervisors at the time of their approval of the master plan.

#### PLANNING ISSUES

During the planning process for the unit, several issues were identified. These are summarized below:

#### ORV Use

Vegetation in the foredunes at the Mandalay Beach site has been significantly damaged by ORV use. Continued unrestricted ORV activity may result in substantial wind erosion and activation of the dunes. In

particular, ORV activity is most destructive at the base of the seaward side of the dunes and likely to cause landward migration of the dune.

# Siting of Permanent Structures

Permanent structures should be appropriately sited to reduce the potential problems caused by wind-blown sand and erosion. The best sites for structures are in the flat plain of the back dune area, between the primary dune and coastal scrub. The biotic community in this area is poorly developed, composed primarily of stands of sea fig (ice plant). However, the sand contains a significant amount of organic material to act as a binding agent and prevent excessive sand erosion. Permanent structures should be sited far enough from the foredunes to avoid destroying vegetation at the base of the dune. No permanent structures should be placed on, behind, or in front of the activated dunes.

# On-Site Oil Production Areas

Two shut-in oil well drilling sites are located on the property, surrounded by brick walls. Past impacts associated with the operation of these units were apparently restricted to the area within the wall. These walls tapped the West Montalvo oil field which has been declining over the years.

# Rare or Endangered Plants and Animals

The potential is low for rare or endangered species of plants or animals occuring at the site. The two endangered plant species in this region, Cordylanthus maritimus ssp. maritimus and Astragalus pycnostachyus ssp. lamosissimus, are found primarily in saltmarshes. While the soil is alkaline in some areas, as evidenced by salt-tolerant species like the clumped spike-rush (Juncus acutus), crispy dock, and Yerba mansa, it is probably not sufficiently alkaline or clayey to promote the growth of these saltmarsh species.

The endangered California least term nests on open sandy areas along the coast just south and north of the park site (at Ormond Beach and McGrath State Beach), but apparently does not find suitable nesting sites within Mandalay State Beach. Should the park unit be colonized at some future time by a breeding population of the least term, all measures will be taken, as determined by the State Department of Fish and Game, to protect the colony.

# General Park Use

Coastal strand, coastal dune, and the intermittent fresh water wetland of the coastal scrub are unique biotic communities. Potential disruption of these habitats should be limited through proper park design.

The drilling pads are potential public safety problems and are also subject to vandalism.

One of the objectives of this project is to retain as much of the natural habitat value as possible. Therefore, a large portion of the site is proposed for interpretive interests.

Another consideration is the area proposed for "primitive camping." This will be a unique park element and will require special attention to design and maintain.

Several areas, particularly in the interpretive area, may need to be improved to maintain successional activity, and provide microclimates for native plant material without the adverse effects of competition from more vigorous introduced plant material.

In several areas, the soil and vegetation have been damaged by the use of off-highway vehicles. These areas will need to be re-established with native vegetation.

Plant material throughout the site should reflect natural character to the extent feasible. Of particular importance in this regard is the interpretive area.

# FACILITY RECOMMENDATIONS

# GENERAL DESIGN CRITERIA

The Pacific Ocean is the most dramatic environmental aspect of the site. It is the primary source of the park unit's identity.

The intended character of Mandalay State Beach is to reflect the natural marine environment, which it is a part. Natural plant material, sand dunes, and an orientation to the ocean are the natural elements which are the basis for the park unit's theme. These elements are the dictating factors for orientation, form, texture, and color of the architectural amenities of the park unit.

It is the goal of this plan to encourage the protection and enhancement of native flora and fauna habitats. In locations where facilities are proposed, native plant materials will be reintroduced. Agronomic conditions within the dunes and marsh will be restored and utilized.

The dune acts as a space articulator separating the beach from the interior. By retaining this feature, the dune will act to deflect winds from the ocean. Here, also, much of the park unit's character will be established.

Camping will be one of the park unit's primary activities. The users will be local group tent camping enthusiasts and bicyclists traveling the Bikecentennial trail. A youth-type "hostel" with enclosed cooking, cleaning, sleeping, and meeting facilities will add to the camping opportunities.

Materials with weathering capabilities, such as wood siding with weathering stains, will be used on all structures to add a sense of permanence. Also, these materials enhance the weathered look of the site.

# DEVELOPMENT CONCEPT

Mandalay State Beach is intended to provide beach and ocean oriented recreational opportunities with the retention of its natural character for interpretation. Figure 4 is the general plan for the park unit. The following is a description of the proposed park facilities.

# Park Entry

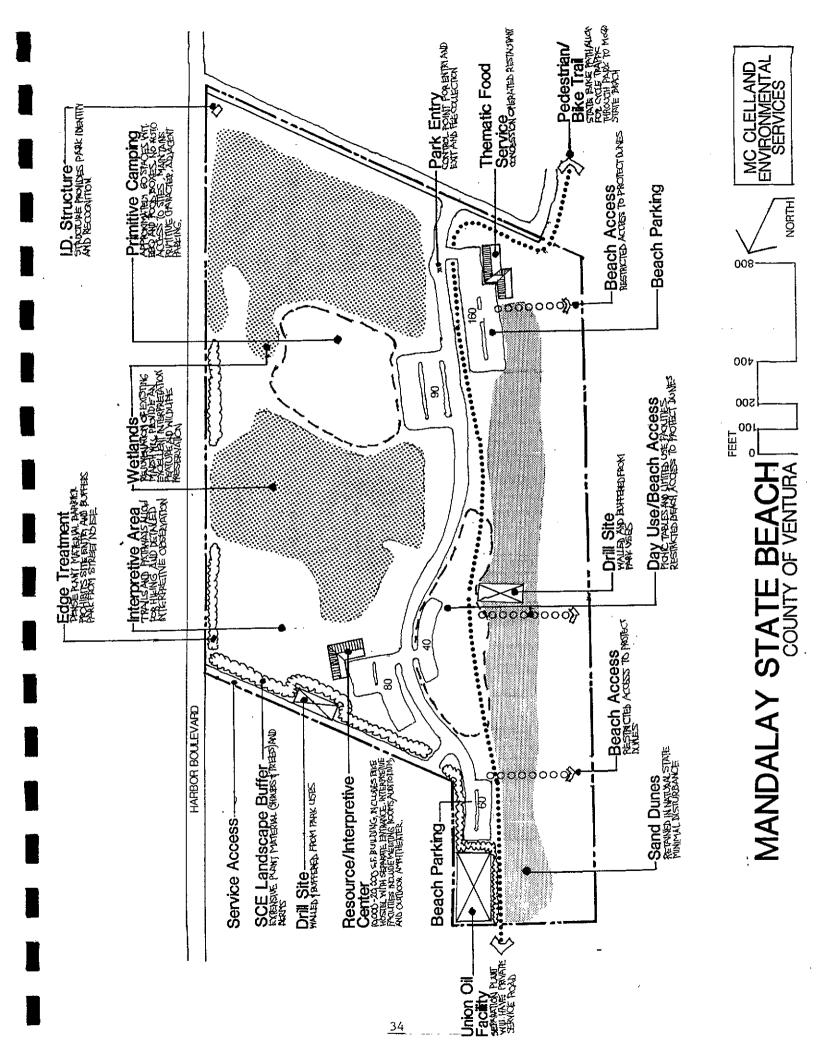
The primary entry to the park is from Fifth Street. Here, a controlled gate and gate house is to be located. Park service personnel collect the appropriate fee as the user enters the state beach. These fees are intended to support the park unit's maintenance and operational needs.

The gate house will be approximately 150 square feet in size. Its function is to house the park service personnel while controlling ingress and egress to the site. Inside the building there should be a desk, counter space, floor safe, storage cabinets, telephone and electric power. Restroom and plumbing facilities may be desirable. Visual access from the inside of the building is required for the desired control.

# Theme Food Service

The theme food service facility is located in the southwest corner of the park unit (see Figure 5). It is within the park unit, yet it will have its own identity. The character of this facility will be consistent with the theme of the park unit.

The theme food service facility will be concessionaire-built-andoperated. It will be situated in a way to maximize its interface with the beach and ocean. Because of this orientation, the operator can maximize the view potential of the ocean, the Channel Islands, and the sunsets. Its function would address the site upon which it is located.



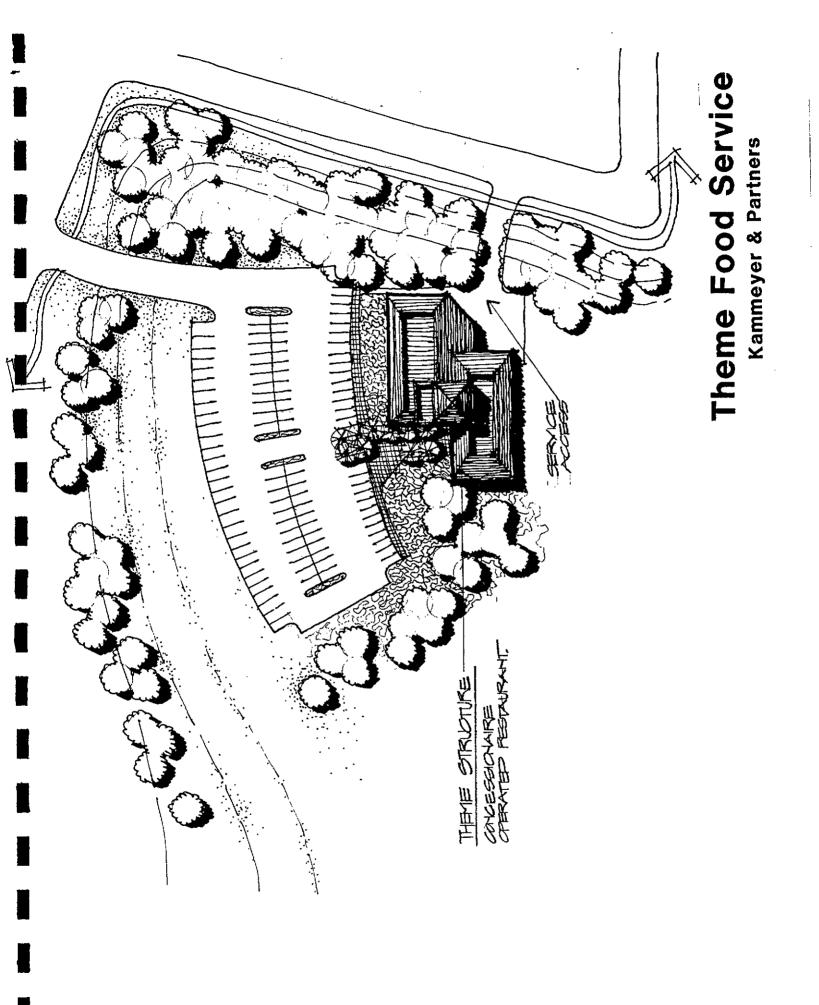


FIGURE 5

A separate access road to the food service facility will be linked to the park entry road prior to entering the control gate. The facility's parking area also includes public parking for day use.

The theme food service facility should be considered priority in construction phasing because of the revenue generation, and the establishment of park unit theme.

# Primitive Camping

Mandalay State Beach is intended to meet some of the unmet camping needs at McGrath State Beach. Only primitive camping will be allowed. Automobile parking will be provided in the general vicinity of the camping area, but it will be necessary to carry all equipment into the camp areas. No vehicular access will be allowed.

There are a total of 70 camping spaces, laid out in such a way as to accommodate small or large groups. Tables, wood burning stoves or barbeques, lockable food and equipment boxes, as well as local access to water and trash containers will be provided in the camping area.

Four small restrooms are accessible from all camping areas. Each building will contain two toilets, one urinal, and two sinks in the men's side; three toilets with two sinks in the women's side.

# Resource/Interpretive Center

A ten thousand to twenty thousand (10,000-20,000) square foot multi-purpose building will house the interpretive center, hostel, resource center, and administrative offices. The building adjoins the interpretive trails.

The interpretive center is to be a starting point for visitors on the interpretive trails. It will serve to indoctrinate the visitor as well as provide an element of control for the trails. The facility will include a display room, office, and several storage/lab rooms. A restroom will adjoin the resource center and support the needs of the entire complex.

The interpretive center program will center around the natural, cultural, and historical features of the Mandalay Beach area. Because of the park's proximity to onshore and offshore energy production areas, a unique potential exists for the interpretation of energy development in coastal areas. Industry will be invited to offer public education programs.

In addition to the day use interpretive facility is the multi-purpose resource center. The center will include amenities associated with many of the youth hostels of Europe. Included among these amenities are indoor overnight sleeping quarters, a food preparation area, and showers. Multi-purpose meeting rooms are also part of the program. The purpose of this portion of the complex is to meet the needs of the bicycle traveler in the fashion of the youth hostels of Europe. Also, the facility may be used as a retreat center on a day use basis or overnight.

The resource facility and youth hostel will include several multipurpose meeting rooms that can be used independently of one another or combined into one large meeting area. It will also include sleeping quarters, kitchen facilities, and toilet/shower facilities.

A small camp store is also part of this multi-purpose building. Snacks, firewood, charcoal, fuel, tackle, etc. are the items intended for retail sale.

Access to the interpretive center will be independent of the rest of the building. The purpose of separate access is to segregate the functions while maximizing the potential for shared use of the structure.

#### Edge Treatment

Barrier fencing and/or dense planting will enclose the site on three sides. Particular attention will be given to the park's interface with Harbor Boulevard. There will be no vehicular or pedestrian access to the site along this edge. Also, parking will be discouraged along Harbor Boulevard.

To restrict access to the Southern California Edison steam generation plant to the north, it is necessary to maintain the current barrier between the site. Barrier plantings will be used along this interface to discourage access and to screen the industrial facility. Pedestrian access to the Edison facility from the beach shall be discouraged.

# Service Area

An acre has been set aside for use by park service personnel. Here, equipment can be stored and work space provided for the maintenance and operation of the park.

#### Oil Production Sites

Two shut-in oil production sites, owned by Standard Oil, are within the park unit. These two sites are to be fenced and screened to prevent physical and visual access.

Another agreement exists between the County and Union Oil for a 1.8 acre oil separation and treatment plant to support offshore production areas.

Each of these facilities will have separate gated access. Service vehicle access is located along the northerly park unit boundary connecting with Harbor Boulevard at the northeast corner of the site. This access will also be used by state beach personnel to the service area.

# ENVIRONMENTAL IMPACT MITIGATION

Several potentially significant issues, relative to development of the Mandalay Beach park unit, were identified during the environmental review process. On November 9, 1982, the Ventura County Board of Supervisors certified the Final Environmental Impact Report (EIR) for Mandalay Beach Park and adopted mitigation measures recommended by the EIR. The Board found "that the project with its incorporated mitigation measures will avoid all of the potential significant effects upon the environment identified within the final EIR."

The following are potentially significant impacts identified by the final EIR and the corresponding mitigation measures, adopted by the Ventura County Board of Supervisors, to be incorporated into the project to avoid any significant impacts.

- 1. Security problem at Southern California Edison plant along northern property boundary.
  - Further restrict access to SCE facility through use of barrier landscaping.
- Compatibility of parks with on site oil production (closed Standard Oil wells).
  - Seek abandonment of surface entry rights from mineral resource owner.
- Conflict with City of Oxnard LCP resource protection policies and the potential loss of wetland vegetation.
  - Relocation of facilities to ensure a 50 foot buffer zone,
     particularly on sandy flats and mixed scrub areas.

- 4. Potential activation of stable sandy areas.
  - Trail systems shall be stabilized through use of boardwalks, netting, or other similar materials. Users will be restricted to designated trails.
- 5. Thematic food service compatibility with foredunes location.
  - Reduce size of parking area at this site to prevent potential impact.
- 6. Not a project impact, but an existing problem is the currently disturbed and degraded nature of many portions of the dune area, vegetation, and marsh areas.
  - Final project plans shall include a comprehensive restoration and habitat maintenance plan with an emphasis on native coastal species (which shall enhance wildlife habitat value) and shall include provisions for monitoring and reports.
- 7. Rare and endangered species California least tern.
  - Should park be colonized at some future time by breeding population, take all such measures as determined necessary by the State Department of Fish and Game.
- 8. Impact of surface runoff or wetland areas.
  - Steps shall be taken to direct runoff away from these areas.
- 9. Chumash ethnographic resource <u>Juncas</u> basket material collection site.
  - Consultation with Native American community in final design phase and involvement in development of interpretive center plans.
- 10. Water supply limitations.
  - Provide for water saving devices in facilities, such as low volume water closets and fixtures which will reduce water loss from leakage. Landscape watering in early morning or evening hours to reduce evaporation losses.
- 11. Sanitation and sewage system carrying capacity.
  - Recommend upgrading lift stations at Seabreeze and Edison Canal at Wooley Road. Possible need to upgrade City water treatment plant to meet 1990 population projection.
- 12. Shortage of law enforcement officers in Oxnard.
  - County Park Ranger staff are designated peace officers and should be able to handle many of the problems which arise.

- 13. Adequacy of fire protection and access.
  - Provision of:
    - a) water system with adequate fire flow pressure
    - b) adequate turning radii
    - c) effective hydrant spacing
    - d) use of fire resistant roofing materials
    - e) automatic fire detection mechanisms throughout buildings
    - f) automatic sprinkler systems in major buildings.
- 14. Visual/Aesthetic project impacts.
  - Removal of vegetation shall be restricted to actual building sites and nature trails to minimize disruption of natural setting. Landscaping and building design plans shall be evaluated to determine their compatibility. Barrier landscaping to be employed in front of conspicuous oil storage tanks situated north of the park site.

# ANTICIPATED ATTENDANCE AND CAPACITY OF FACILITIES

An annual attendance of 135,000 visitors is anticipated for Mandalay State Beach. This projected attendance is as follows:

# Projected Attendance and Parking Requirements

# Attendance

Overnight Hostel By Bike Day Use	Camping	(primitive)	22,400 25,000 50,000 37,600
	TOT	'AL	135,000

# Parking

Peak Day (excludes parking at hostel and camping area) 40 spaces

Source: Kammeyer and Partners (1981).

#### TRANSPORTATION

Vehicular access to the park will be from Fifth Street. The entrance to Mandalay State Beach is located near the southwest corner of the park, providing a vista of the ocean prior to entering the site.

# Internal Road and Parking

An entry booth at Fifth Street provides controlled access to the site.

Several parking areas are located along the entry road. The first parking area is separated by the park road, and is intended for camping area users. It provides parking for 60 cars. The interpretive resource center also provides parking for 60 cars. A turn-around and drop-off road are provided here as well.

Adjacent to the Union Oil facility at the far north of the site, parking for fishermen has been located along the park service road.

# Service Vehicle Access

A separate vehicle access has been provided from Harbor Boulevard at the northeast corner of the site. This road is intended for service vehicles only and provides access to the drilling and oil facilities, as well as to the park service yard.

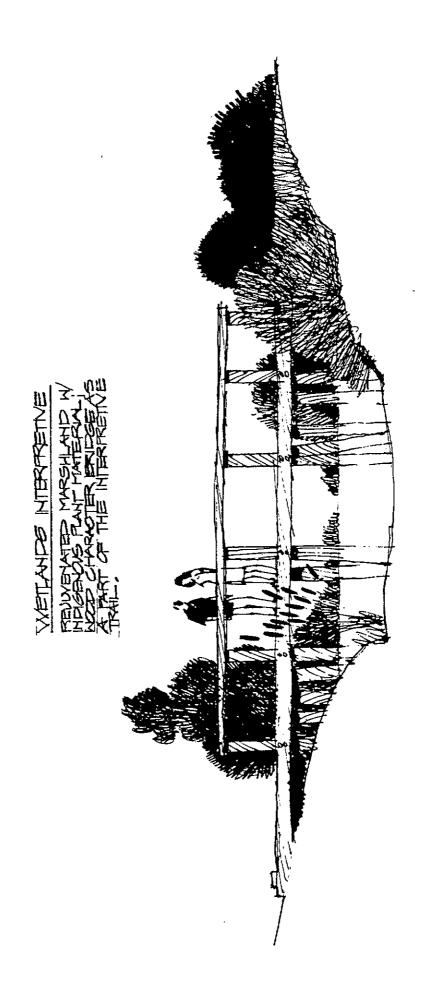
# INTERPRETATION

Thirty acres have been set aside for interpretation of the site history and natural features. Walking trails will originate at the interpretive center and circulate through the eastern portion of the site (See Figures 6 and 7). Particular attention will be drawn to the natural geologic, hydrologic, and biologic aspects of the site. This will be done by marking certain areas that represent a natural condition and directing the visitor to these areas via a trail system.

Trails across the foredunes have significant potential to activate stable sandy areas by destruction of vegetation. Therefore, park users will be restricted to designated trail corridors across the foredunes, and these points shall be stabilized through use of boardwalks, netting, or other similar materials.

In the southeast corner, the interpretation of a freshwater marsh will occur. Here, a seasonal wetland is to be restored and appropriate native plantings re-introduced to create a natural environment typical of a freshwater marsh.

Interpretation of energy development in coastal areas is an opportunity at the center. There are on-site oil production activities, off-shore oil drilling and production, and an on-site separation plant. In addition, the Edison electrical generating station is adjacent to the site. Each one of these energy facilities is important to our society. They each offer a number of environmental opportunities and constraints. A description of these energy related activities and their effect on the environment is another element that could be addressed at the center.



# Interpretive Area Kammeyer & Partners

# Interpretive Area Kammeyer & Partners

# CONCESSIONS

The development concept for Mandalay State Beach includes the provision of revenue potential from private concessions to offset the maintenance and operational costs of the park unit. This will be accomplished through a concessionaire built and operated food service facility. Although the food service facility will be within the park unit, it will have a separate identity but will be consistent with the overall park unit theme.

# LOCAL LAND USE PLANNING RECOMMENDATIONS

# Regional Recreational Policies

The Ventura County Regional Recreation Areas Plan, accepted in concept by the Board of Supervisors on June 21, 1977, designates the Mandalay Beach site a "Specialized Regional Park." Pursuant to the definition of county parks, adopted by the Board of Supervisors on November 13, 1973, and subsequently incorporated into the Regional Recreation Areas Plan:

"A Specialized Facility is a singular recreational facility of regional or county-wide significance. It may be an individual element or it may be a unit of a larger or more inclusive County Park. Specialized Facilities may include:

Golf Courses

Beaches

Marinas

Auditoriums

Campgrounds

Water Sports Areas

Zoos

Botanical Gardens

Group Picnic Areas

Sport Centers

Shooting Ranges

Archery Ranges

Fishing Lakes

Riding and Hiking Trails

Bicycle Trails

Parkways."

The adopted Ventura County Regional Recreation Areas Plan sets forth an overall system of recreation areas and specialized facilities to meet the needs of the projected 1990 county population.

# Local Recreational Policies

The 1990 Land Use Element of the Oxnard General Plan designates the Mandalay Beach site a "Park." The Public Facilities Component of the City's Land Use Element designates the site a "Regional Park." Consistent with this plan designation, the City's Zoning Ordinance designates the site "C-R" (Community Reserve) which is intended "to provide a district of predominantly open space which, in the public interest, should retain this character" (Oxnard Zoning Ordinance, Division 17, Section 34-103). Permitted uses in this zoning district include recreation.

# Local Coastal Program

Currently, the City of Oxnard is in the process of preparing a Local Coastal Program (LCP) as required by the California Coastal Act of 1976. Upon certification of its LCP, the City will have the responsibility for the issuance of coastal development permits to ensure consistency with its LCP for all public and private projects within the City's Coastal Zone.

The Land Use Plan portion of the City's LCP, approved by the California Coastal Commission, designates the eastern half of the Mandalay Beach site, paralleling Harbor Boulevard, a "Resource Protection Area." The western half of the site is designated a "Recreation Area." The specific coastal access and recreation policies of the Oxnard LCP Land Use Plan applicable to the Mandalay Beach site, particularly the western half, include:

"Access facilities for the new City/County Park at Fifth Street and Harbor Boulevard shall include ample parking, an access road, and day use/group use facilities. All facilities developed shall not be located within the sensitive habitats or sand dunes. Recreational uses shall include beach swimming, fishing and other related uses; day-use facilities such as picnic tables, fire pits, interpretive displays and limited children's play facilities. Other improvements should include parking and restroom facilities and boardwalk access trails across the sand dunes to the beach." (Policy 45.a)

- "The Scenic Route designated for Mandalay Beach Road north of Fifth Street is deleted, and a north-south bike path shall be provided. The alignment shall avoid all sensitive habitat areas. (Policy 45.b)
- "Public access to and along the shoreline and the Inland Waterway shall be required as a condition of permit approval for all new developments between the shoreline and the first public roadway inland from the shore, except as provided...."

In addition to these coastal access and recreation policies, the Oxnard LCP Land Use Plan contains the following resource protection policies directly applicable to the Mandalay Beach site, particularly its eastern half:

- "All non-authorized motor vehicles shall be banned from sensitive areas." (Policy 6.a)
- "Scientific, educational, and light recreational uses shall be conditionally permitted uses in all sensitive resource areas.
   Development shall be designed and sited to minimize impacts to the area. Permitted uses shall not be allowed to significantly disrupt habitat values." (Policy 6.b)
- "In sand dune areas, foot traffic shall be minimized, and allowed only on established paths or boardwalks. Disturbance or destruction of any dune vegetation shall be prohibited, unless no feasible alternative exists, and then only when

re-vegetation with native California plants is a condition of approval." (Policy 6.c)

- "New development adjacent to wetlands or resource protection areas shall be sited and designed to mitigate any adverse impacts to the wetlands or resource." (Policy 6.d)
- "A buffer of 100 feet in width shall be provided adjacent to all resource protection areas. The buffer may be reduced to a minimum of 50 feet only if the applicant can demonstrate the large buffer is unnecessary to protect the resources of the habitat area. All proposed development shall demonstrate that the functional capacity of the resource protection area is maintained. The standards to determine the appropriate width of the buffer area are:
  - biological significance of the area
  - sensitivity of species to disruption
  - susceptibility to erosion
  - use of natural and topographic features to locate development
  - parcel configuration and location of existing development
  - type and scale of development proposed

When a development is proposed within an environmentally sensitive habitat area or a resource protection area, or within 100 feet of such areas, a biological report shall be prepared which includes applicable topographic, vegetative and soils information. The information shall include physical and biological features existing in the habitat areas. The report shall be prepared by a qualified biologist, and shall recommend mitigation measures to protect any impacted resources. All recommendations shall be made in cooperation with the State Department of Fish and Game. When applicable, restoration of damaged habitats shall be a condition of approval." (Policy 6.d)

- "When a development is proposed within or near an environmentally sensitive habitat area, applicable topographic, vegetative and soils information shall be provided. The information shall include physical and biological features existing in the habitat areas." (Policy 6.e)
- "Where the sensitive resource area comprises only a part of a parcel or parcels under contiguous ownership, the City may permit an increase in the allowable density of the non-resource area in return for the preservation of the resource area. Density increases shall only apply for allowable uses as designated by the Land Use Map. Development adjacent to the resource area shall be sited and designed to mitigate any adverse impacts on the resource." (Policy 45.8)
- "Wetlands shall be defined as:

Land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes. In certain types of wetlands, vegetation is lacking and soils are poorly developed or absent as a result of frequent and drastic fluctuations of surface-water levels, wave action, waterflow, turbidity or high concentrations of salts or other substances in the water or substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during the year, and their location within, or adjacent to, vegetated wetlands or deep-water habitats." (Policy 45.9)

Within the eastern half of the Mandalay Beach site, the most sensitive area is the mixed backdune scrub and marsh (see Figure 2). The marsh area is a wetland, as defined by the California Coastal Act and Policy 45.9 of the Oxnard LCP; therefore, strong resource protection requirements are imposed on the Mandalay Beach site by these coastal management programs.

# COST-REVENUE ANALYSIS

To meet policy direction of the Ventura County Board of Supervisors, which will be the operator of the State Park unit, Mandalay State Beach has been designed to provide regional recreation needs on a self-supporting basis. Various private enterprise, leasehold improvements have been incorporated into the design concept. These leasehold improvements provide the public expanded recreation opportunities through a cooperative program of development between private enterprise and government. The resultant governmental agency revenue, coupled with the absence of capital funding requirements, can increase the capability of the system to meet public needs.

The cost summary, annual revenue potential, and annual maintenance and operation costs are in Tables 1 to 3.

Table 1.

PRELIMINARY COST ESTIMATE November 1979

ITEM	QUANTITY	UNIT COST	SUB-TOTAL	TOTAL
SITE DEVELOPMENT				
Grubbing	Allow		\$ 40,000	
Rough Grading	Allow	=		
Construction Staking	Allow		15,000	
Drainage	Allow		2,000	
Demolition	Allow		2,000	
Utilities	Allow		20,000	
Traffic Control	Allow		25,000	
Parking	37,000 SF	\$ 1.10	40,000	
Roads (24')	81,600 SF	1,11	111,600	
Bike Path (11')	3,400 LF	15.11	51,000	
Soil Cement Path (4')	23,600 SF	1,60	14,160	
Lighting	Allow		20,000	
Camping (including picnic tables, food box, trash can, barbecue)	50 Each	1,500.00	75,000	\$ 532,460
WETLANDS				
Rejuvination	Allow		200,000	200,000
LANDSCAPE DEVELOPMENT				
New Planting (including buffer	28 AC	2,300.00	64,000	
dune stabilization)	C C	6	000	000
lrigation	28 AC	4,500,00	126,000	190,000
SITE FURNITURE				
Graphics and Signage	Allow		10,000	10,000

ITEM	QUANTITY	UNIT COST	SUB-TOTAL	TOTAL
BUILDING DEVELOPMENT Resource Center/Hostel/Interpretive Center	10,000 SF \$	60.00	\$ 600,000	
Liury Structure I.D. Structure Restrooms	Allow 4 Each	80,000,00	10,000	000,036 \$
MAINTENANCE 90 Days	68 AC	1,300.00	000'88	88,000
			SUB-TOTAL	\$1,038,000
		15% BOND, PROFIT, OVERHEAD	IT, OVERHEAD	155,700
			GRAND TOTAL	\$1,193,700

# NOTES:

- These estimates reflect construction costs as of November 5, 1979; no escalation has been considered.
- Two additional restrooms and additional parking have been added since the November 5, 1979 submittal.

Source: Kammeyer & Partners, Inc.

Table 2.

ANTICIPATED MAINTENANCE AND OPERATIONS COSTS

AL TOTAL	0	0	\$ 100,000
SUB-TOTAL	\$ 35,000	48,000	17,000
UNIT COST			
QUANTITY/UNIT	ALLOW	ALLOW	ALLOW
ITEM	Salary and Employee Benefits	Service and Supplies	Fixed Assets
ITEM NO.	ij	2.	m

Source: Kammeyer & Partners, Inc.

Table 3.

ANNUAL REVENUE POTENTIAL

	שטעמט		Ottokatac	MOTOGOMON	TO TO DE CIRCO	1 2 2 6 6
FUNCTION	REVENUE	EXPENSES	PROFIT	LEASE RATE	LEASE INCOME	TO COUNTY
Interpretive Center	\$ 28,000			68	\$ 1,680	\$ 1,680
Snack Shop & Camp Store	25,000			68	1,500	1,500
Parking for Day Use	18,700	\$ 3,700	\$ 15,000	*		15,000
Hostel	125,000			හ %	10,000	10,000
Primitive Camping	12,800			*		12,800
Restaurant - Assume Land Rental Only						40,000
					TOTAL	086,088

# NOTES:

- 1. These estimates do not include debt service.
- 2. \*Operated by the County (no concessionaire).
- These estimates are based on 1979 dollars and no escalation is considered.

Source: Kammeyer & Partners, Inc.